

REMARKS

Applicant appreciates the Examiner's thorough examination of the subject application and requests reconsideration of the subject application based on the foregoing amendments and the following remarks.

Claims 1-17 are pending in the subject application. Claims 9-12 are withdrawn from consideration as the result of an Examiner's earlier restriction requirement. In view of the Examiner's earlier restriction requirement, Applicant reserves the right to present the above-identified withdrawn claims in a divisional application.

Claims 1-8 and 13-17 stand rejected under 35 U.S.C. §102, 35 U.S.C. §103, 35 U.S.C. §112, first paragraph, and/or 35 U.S.C. §112, second paragraph.

Claims 1, 2 and 17 were amended to more distinctly claim Applicant's invention. Claims 1, 2, and 13-17 were amended to address the Examiner's non-art based rejections.

Claims 3-5, 7, and 15 were amended to reflect changes in the language of the base claim and any intervening claims. Claims 18-20 were added to claim embodiments of the present invention. The amendments to the claims are supported by the originally filed disclosure.

The specification was objected to and correction required. The specification was amended to address the Examiner's objection. The amendment(s) to the specification do not introduce new matter because they either are editorial in nature or are supported by the originally filed disclosure.

35 U.S.C. §112 REJECTIONS

Claims 1, 3-8 and 13-16 stand rejected under 35 U.S.C. §112, first paragraph because it is

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alleged that the phrase "and arranged thereon" added by a previous amendment to claim 1 is not disclosed in the subject application. It is asserted in the Office Action that the support members are not actually arranged on the support surface because they are shown as protruding through apertures in the substrate bearing surface. In addition, claims 1, 3-8 and 13-16 also stand rejected in the Office Action under 35 U.S.C. §112, second paragraph because it asserted that the term thereon makes the claims unclear. Applicant respectfully traverses. Applicant assumes that claims 3-8 and 13-16 stand rejected because of their dependency from a claim with an identified concern.

In the interests of avoiding further semantical arguments over the meaning or usage of the term "thereon" as well as whether or not such usage makes the claims unclear, Applicant has amended claim 1 to eliminate the term "thereon" and instead is using more specific language to describe the arrangement of the support members. Applicant would note, however, that the specification and drawing figures of the subject application clearly describe and depict that the support members are arranged with respect to the substrate bearing surface, or when viewed from a position above the substrate bearing surface, so as to be in the arrangement set forth in claim 1.

Accordingly, claims 1, 3-8 and 13-16 satisfy the requirements of 35 U.S.C. §112, first paragraph and, therefore, these claims are allowable and the specification is considered acceptable.

35 U.S.C. §102/ §103 REJECTIONS

The Examiner rejected claims 1-8 and 13-17 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative under 35 U.S.C. §103 as being unpatentable over, Mears et al. [USP 5,040,484; "Mears"]. Applicant respectfully traverses as discussed below. Because claims were

amended in the instant amendment, the following discussion refers to the language of the amended claims. However, only those amended features specifically relied upon to distinguish the claimed invention from the cited prior art shall be considered as being made to overcome the cited reference.

In the above-referenced Office Action, it is asserted that by virtue of the comprising language the claims do not exclude the presence of additional support members such as those shown in Mears. Applicant has amended each of claims 1, 2 and 17 to provide that the plurality of support members are arranged so as to consist essentially of one group of support members that are arranged so as to extend only along one side of the substrate bearing surface. Applicant would note that the transitional phrase "comprising" while making a claim open does not mean that the phrase can be used to eliminate language (e.g., only, consisting essentially of) from a claim or to read language out of a claim. This structure is nowhere disclosed in Mears and it is physically impossible for the apparatus disclosed in Mears to have support members arranged in this fashion as the wafers would fall off the rotatable disk as the disk is being rotated, which is a required and disclosed operation of the apparatus disclosed in Mears. Consequently, an assertion that Mears could be so modified must fail, because under patent law, and as indicated below, any asserted modification to an invention disclosed in a reference CANNOT destroy the intent, purpose or function of the disclosed invention. If it does then the Patent Laws clearly state that the suggested modification cannot be obvious. Applicant submits that this is clearly the case here.

The Office Action also asserts that the moving means limitation recited in claims 1, 2 and 17 broadly read on a means disclosed in Mears that moves the apparatus or rotatable disk 2 on

which the finger or support members in Mears are disposed. It is thus asserted that since the support members are thereby moved, this discloses the moving means of the present invention. Notwithstanding that the assertion is apparently inconsistent with 35 U.S.C. §112, sixth paragraph, Applicant has amended the moving means clause to provide that the moving means is operably coupled to the support members. In addition, the claims were further amended to provide that the moving means moves the support members relative to the substrate bearing surface as is apparently being suggested by the Examiner.

As to claim 2, this claim was further amended so as to revise the term long axis to longitudinal axis as is apparently being suggested by the Examiner. It is respectfully submitted that Mears nowhere discloses, suggests or teaches a moving means that is operably coupled to the support members of the one group of support members and a moving means that causes each of the plurality of support members of the one group to rotate about the longitudinal axis of each support member.

This is clearly different from Mears in which all of the support members on the rotatable disk are rotated at the same time about the axis of revolution of the disk. In Mears, and in contrast to the present invention none of the support members are being rotated about their respective longitudinal axis. Such a motion is not disclosed, taught or suggested anywhere in Mears and if the apparatus was modified to perform such motion, then the function, intent and purpose of the invention disclosed in Mears would be destroyed.

As to claim 17, this claim was further amended so as to revise the term long axis to longitudinal axis as is apparently being suggested by the Examiner. It is respectfully submitted that

Mears nowhere discloses, suggests or teaches a moving means that is operably coupled to the support members of the one group of support members and a moving means that is configured and arranged so as to cause each of the plurality of support members of the one group to: (a) move in one direction with respect to the longitudinal axis of each support member, (b) move in a direction generally perpendicular to the longitudinal axis of each support member, (c) move in a direction generally perpendicular to the substrate end surface, or (d) rotate about the longitudinal axis of each support member.

The foregoing is clearly different from Mears in which all of the support members on the rotatable disk are rotated at the same time about the axis of revolution of the disk. In Mears, and in contrast to the present invention, none of the finger members are being rotated about their respective longitudinal axis and none of finger members is being caused to move in any of the other ways set forth in claim 17. Such motion is not disclosed, taught or suggested anywhere in Mears. In addition, if the apparatus in Mears was modified to perform such motion, then the function, intent and purpose of the invention disclosed in Mears would be destroyed.

As to claims 13, 14 and 16, each of these claims also was amended so as to change long axis to longitudinal axis as is apparently being suggested by the Examiner. As to claims 13 and 14, each of these claims provide that the support members move in a given direction with respect to a plane in which lies the longitudinal axis of each of the support members of the one group of support members. The support members in the apparatus disclosed in Mears are not, not can they be, arranged so that the longitudinal axis of each of the support members lies in a plane and moreover that all of the support members of the one group move in one direction with respect to this plane

(claim 13) or in a direction that is generally perpendicular to the plane (claim 14). As such, Mears does not disclose the moving means of any of claims 13 and 14. In addition, Mears does not teach nor suggest the moving means of any of claims 13 and 14.

As to claim 16, as indicated above in the discussion regarding claims 2 and 17, Mears does not disclose, teach or suggest a moving means in which each support members rotates about its respective longitudinal axis. Such remarks also apply to distinguish the moving means of claim 16 from Mears.

As to claim 15, this claims further provides that the moving means is configured and arranged so as to cause each of the support members, namely each of the support members that are supporting said one end surface of the substrate to move in a direction generally perpendicular to the substrate end surface. This motion is nowhere disclosed, taught or suggested in Mears and the direction of motion referred to in the Office Action grounds for rejection also does not disclose such motion.

As to claim 5, this claim has always included the further limitation that a plurality of moving means are provided which are connected to the plurality of support members such that each of the support members is moved independently. Independent movement of each support member is not disclosed, taught or suggested anywhere in Mears. Claim 5 was amended in the foregoing amendment to more clearly indicate that the mechanism includes a plurality of moving means and to be consistent with the amended language of claim 1.

As such, for the foregoing reasons as well as the reasons already of record, Applicant respectfully submits that the as-amended claims are clearly distinguishable from the cited art, in

both structure and function. It also is submitted that the cited reference includes *no* suggestion or teaching nor offers any motivation for modifying the apparatus disclosed in Mears so as to yield the substrate supporting mechanism of the present invention. Further, it is submitted that if the apparatus described in Mears was modified so as to yield the substrate supporting mechanism of the present invention, such a modification would destroy the intended purpose and function of the apparatus as disclosed in Mears.

As provided in MPEP-2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegai Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Or stated another way, "The identical invention must be shown in as complete detail as is contained in the ... claims. *Richardson v Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ 2d. 1913, 1920 (Fed. Cir. 1989). Although identify of terminology is not required, the elements must be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). It is clear from the foregoing remarks that the above identified claims are not anticipated by Mears.

As the Federal Circuit has indicated, in deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify *corresponding elements* disclosed in the allegedly anticipating reference (emphasis added, citations in support omitted). *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, 730 F. 2d 1452, 221 USPQ 481,485 (Fed. Cir. 1984). In concluding that the '770 Patent did not anticipate the claims, the Federal Circuit in *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, at 221 USPQ 485-486,

further provides that:

The '770 patent discloses an entirely different device,
composed of parts distinct from those of the claimed invention, and
operating in a different way to process different materials differently.
Thus, there is no possible question of anticipation by equivalents.
Citations omitted.

It is clear from the foregoing remarks, that the allegedly corresponding elements disclosed in Mears do not in fact correspond to the elements of the claimed invention. It also is clear that the apparatus described in Mears functions and operates in a different manner from that of the claimed invention. Thus, there can be no disclosure or teaching in Mears of Applicant's invention.

As the Federal circuit has stated, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260,1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. *Para-Ordance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.2d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995). As indicated above, Mears does not suggest the desirability of the modification to the apparatus disclosed therein so as to yield the supporting mechanism and methodology claimed by Applicant.

As provided in MPEP 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F. 2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As provided above, Mears includes no such teaching, suggestion or motivation.

Also, and as provided in MPEP 2143.02, a prior art reference can be combined or modified to reject claims as obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 19866). Additionally, it also has been held that if the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Further, and as provided in MPEP-2143, the teaching or suggestion to make the claimed combination and the reasonable suggestion of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). As can be seen from the forgoing discussion regarding the disclosure and teachings in Mears, there is no reasonable expectation of success provided in Mears that if the finger members in Mears were modified as taught by Applicant they would be reasonably successful in overcoming the problem described by Applicant. Also, it is clear from the foregoing discussion that the modification essentially required to the apparatus disclosed in Mears so as to yield the invention claimed by Applicant, would change the principle of operation of the apparatus disclosed in Mears.

As provided by the Federal circuit, a 35 U.S.C. §103 rejection based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in a reference, is not proper and the *prima facie* case of obviousness cannot be properly made. In short there would be no technological motivation for engaging in the modification or change. To the contrary, there

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would be a disincentive. *In re Gordon*, 733 F. 2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In the present case it is clear that if the apparatus in Mears was modified so as to yield the invention claimed by Applicant, such a modification would destroy the intent, purpose or function of the device as taught by Mears.

It is respectfully submitted that for the foregoing reasons, claims 1-8 and 13-17 are patentable over the cited reference and, thus satisfy the requirements of either 35 U.S.C. §102(b) or 35 U.S.C. §103. As such, these claims, including the claims dependent therefrom are allowable.

CLAIMS 18-20

As indicated above, claims 18-20 were added to more distinctly claim embodiments/aspects of the present invention. These claims are clearly supported by the originally filed disclosure, including the originally filed claims. It also is respectfully submitted that these added claims are patentable over the cited prior art on which the above-described rejection(s) are based.

SEPCIFICATION OBJECTIONS

The Examiner objected to the specification of the subject application and requested correction thereof.

Specifically, the Examiner identified an apparent inadvertence on page 1 of the subject application as explained on page 2 of the above-referenced Office Action. Applicant amended the text as suggested by the Examiner

It is respectfully submitted that for the foregoing reasons, the specification satisfies

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applicable Patent laws and rules and, therefore is considered acceptable.

It is respectfully submitted that the subject application is in a condition for allowance. Early and favorable action is requested.

Applicant believes that additional fees are not required for consideration of the within Response. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,
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Date: December 24, 2003

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